This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

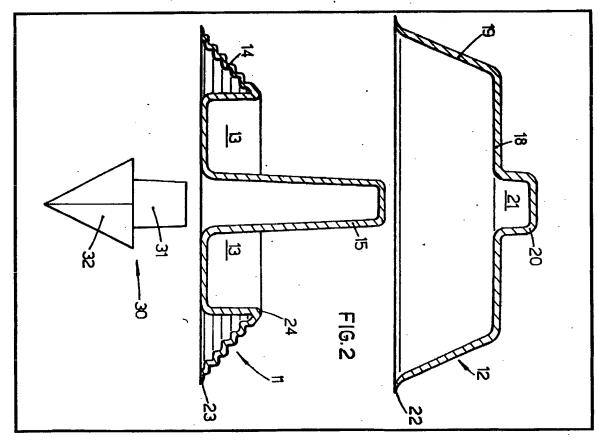
As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

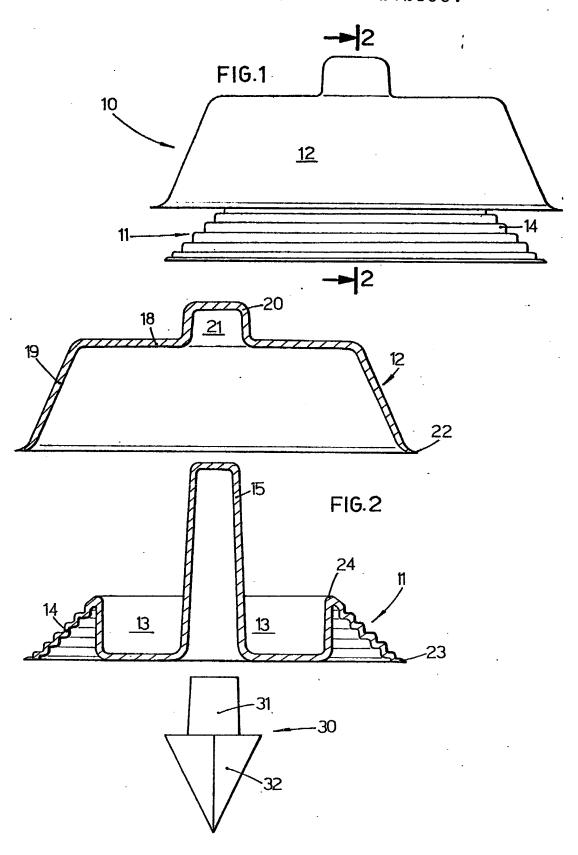
(12) UK Patent Application (19) GB (11) 2 023 987 A

- (21) Application No 7918463
- (22) Date of filing 25 May 1979
- (23) Claims filed 25 May 1979
- (30) Priority data
- (31) **25189 19859**
- (32) 30 Jun 1978 2 Feb 1979
- (33) Italy (IT)
- (43) Application published 9 Jan 1980
- (51) INT CL3 A01M 25/00
- (52) Domestic classification A1M DH
- (56) Documents cited
 - GB 1448214
 - GB 1402404
 - GB 1382822
 - GB 1036184
 - GB 753571
 - GB 733627
 - GB 708226 GB 541844
 - GB 526444

- GB 398217
- (58) Field of search A1M
- (71) Applicant Alessandro Arrigoni Via A Omodeo 1–20151 Milan Italy
- (72) Inventor Alessandro Arrigoni
- (74) Agents Marks & Clerk
- (54) A device for controlling rodents by poisoned bait
- (57) A device for controlling rodents by means of poisoned bait comprises means for accommodating the bait, such as a body (11) formed with a tray (13) and an access ramp (14) thereto, and a protective cover (12) suitable to be placed on the body (11) at such a position as to leave sufficient access

to the bait, along the ramp (14), for the passage of rodents such as rats or mice, but preventing access to the bait of domestic animals and poultry.





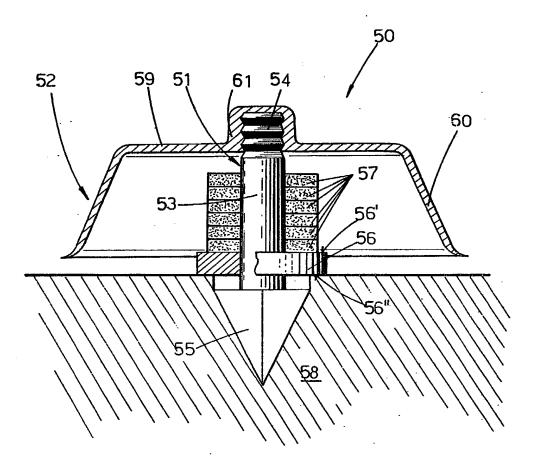


FIG.3

5

15

SPECIFICATION

A device for controlling rodents by poisoned bait

This invention relates to a device for controlling rodents, such as rats, mice and similar animals, by poisoned bait, while ensuring a high degree of safety to domestic animals and 10 poultry.

Infestation by mice or rats or similar animals is a problem that for some time has taken increasingly serious aspects both in

towns and country-sides.

Attempts have been made to get rid of or at least control the large number of mice or rats generally by distributing in the infested places poisoned baits, of which there are many very different types. However, this system suffers 20 from the disadvantage that the baits are in the reach not only of mice and rats, but also of other animals, such as dogs, cats or poultry, which animals may be injured as a result of ingestion of such baits and also remove the 25 baits intended for the mice or rats. It is neither helpful nor expedient to partly cover the bait with stones or the like, that can be

easily moved by, for example, a dog. The present invention provides a device for 30 controlling rodents by means of poisoned bait, comprising means for accommodating a bait, and a protective cover for the bait, applicable on the said means for accommodating the bait at such a position as to leave sufficient access 35 to the bait for the passage of rodents.

Thus there is provided a device comprising means for accommodating a poisoned bait and a protective cover for application with respect to the ground or soil leaving a bait 40 access passage sufficient for the passage of mice or rats, but not sufficient for the passage

of domestic animals or poultry.

In one preferred embodiment, the device comprises a body to be placed on or fixed to 45 the ground, and a cover that can be firmly but removably secured to the body. The body is formed with a part to accommodate a poisoned bait, which part is generally in the form of a tray, and an access ramp to the 50 tray. Preferably, a generally hollow stem or shank projects upwards centrally of the tray possibly for allowing the disposition thereon of an annular bait. The cover is of sufficient dimensions to cover at least the tray and 55 preferably also the ramp, and is generally attached onto the stem at such a position as to be spaced from the body ramp by a distance just sufficient to form one or more passages for the entry of mice or rats. The

60 size of such a passage (or such passages) and the configuration there is such that access to the bait is inhibited to bigger animals, such as chickens, dogs and cats, or the introduction of

In another preferred embodiment, the de-65

vice comprises a stem to be fixed on the ground, on which annular baits are slipped, and a cover which is firmly but removably secured to the stem. The cover is screw

70 threaded on the stem at such a position as to remain spaced apart from the ground by a distance just sufficient to form one or more passages for the entry of mice or rats. Due to the size and configuration thereof, this pas-

75 sage (or passages) are such as not to allow the entry of bigger animals or the introduction

of a paw.

Therefore, the device according to the invention affords the elimination of mice or rats 80 without any danger to domestic animals. It also allows protection of the bait against the weather, so that the effectiveness of the bait is prolonged. Finally, it allows ready location of the bait, when the latter have to be re-85 moved or replaced.

Moreover, in a preferred embodiment, the device may be made of moulded plastics material, so as to be durable and economic to

manufacture.

The invention will be further described, by 90 way of example only, with reference to the accompanying drawings, in which:

Figure 1 is a side view of one embodiment of a device according to the invention for

95 controlling rodents;

Figure 2 is an axial sectional view of the device taken along the line 2-2 in Fig. 1, and exploded for clearer illustration; and

Figure 3 is an axial sectional view of 100 another embodiment of a device according to the invention.

Figs. 1 and 2 show a device 10 for the control of mice or rats or similar animals which essentially comprises a body 11 and a 105 cover 12.

The body 11 is formed with a generally tray-like portion 13 surrounded by an access ramp portion 14 and centrally having an upward extending projecting shank or stem 110 15.

The stem 15 is circular in plan, while the tray 13 is annular and the ramp 14 completely surrounds the tray. However, other different forms are possible, such as square or

115 rectangular.

٠.

Preferably, the ramp 14 has a generally smooth slope and is undulated or otherwise configurated to facilitate upward movement. At the bottom the body 11 is flattened so as

120 to steadily bear on a planar surface, for example paved (cemented or tiled) ground. For fixing on loose ground, provision is made for a fastening element 30, comprising a part 31 suitable to be inserted in and retained in the

125 hollow stem 15 and a point 32 to be driven into the ground.

The cover 12 has a substantially planar top portion 18 and an outer bell-like portion 19. At its centre, the position 18 has a protuber-130 ance 20, internally forming a cavity 21, designed to be of such dimensions as to tightly but removably engage on the upper end of the stem 15. The total dimensions of the cover 12 are preferably designed so that,

5 when the cover 12 is mounted on the body 11, the outer edge 22 thereof at least slightly extends beyond the external extreme edge 23 of the ramp, and at an at least slighly lower level than the upper edge 24 of the ramp.

10 However, these dimensions may vary, it being sufficient that when mounted the cover has its portion 19 at such a vertical distance from the

sufficient that when mounted the cover has its portion 19 at such a vertical distance from the ramp that between the inner face of the cover and the ramp there remains a sufficient pas-15 sage for a rat, for example, to pass (Fig. 1).

The device is used by placing a poisoned bait either in the tray 13 or about the stem 15, and then mounting the cover 12 on the body 11 and arranging the device on the pre-20 selected area. A rat, attracted by the bait, can readily pass along the passage between the cover and the ramp, reaching the tray so as to bite the bait. On the other hand, poultry or domestic animals cannot introduce their head into the device to reach the bait, because of the particularly complicated movement which would be involved, since the passage mouth or inlet is at ground level and because of the narrowness of the passage, and similarly dogs 30 and cats cannot reach the bait with a paw.

Fig. 3 shows a device 50 which comprises a shank or stem 51 and a cover 52. The stem 51 comprises an elongate body 53, which at its upper end is provided with a thread 54 for 35 engagement in an internal threaded portion of the cover 52. At its lower end the stem 51 is provided with a point 55 to be driven into the ground.

The elongate body 53 has clamped or oth40 erwise secured thereon a stop member 56 of any convenient shape, for example annular, as shown in the drawing, which may be secured to the point 55 or slightly spaced apart therefrom, an upper smooth portion 56' of which 45 serves as a bearing for disc-baits 57. A lower portion 56" of the stop member 56 serves as bearing on the ground 58, in order to prevent undue penetration of the point 55 into the ground, and accordingly undue lowering of

50 the cover 52 which would prevent the entry of for example rats.

The cover 52 has a top portion 59 which is substantially flat and a peripheral bell-like portion 60. At its centre, the portion 59 has a protuberance 61 which is internally threaded and adapted to screw down on the thread 54 of the stem 51. The device is used by slipping the annular baits 57 on the elongate body 53 and then screwing down the cover 52 and

60 placing the device on the pre-selected area, or by first driving the stem 51 into the ground, arranging the baits thereon and then applying the cover 52. A rat, attracted by the bait, can readily creep beneath the cover 52, so as to 65 bite the bait. On the other hand, poultry cannot introduce its head into the device, due to the narrowness of the passage, and similarly dogs and cats cannot reach the bait with a paw.

70 The embodiments described above may be suitably made of moulded plastics material. It will be appreciated that the device according to the invention could be constructed differently from the embodiments described. For

75 example, the cross-sectional shape of the cover may be any dome-like shape, and the engagement between the cover and stem, or between the cover and body, may be by means other than those described.

80 CLAIMS

A device for controlling rodents by means of poisoned bait, comprising means for accommodating a bait, and a protective cover 85 for the bait, applicable on the said means for accommodating the bait at such a position as to leave sufficient access to the bait for the

passage of rodents.

2. A device as claimed in Claim 1, where90 in the said bait accommodating means comprise a body formed with a tray and an access
ramp thereto, the cover being suitable to be
placed on the body and removably secured
thereto at such a position as to leave, with

95 respect to the body, one or more passages along the access ramp of suitable dimensions for the passage therethrough of a rodent.

A device as claimed in Claim 2, wherein the said body has a central stem projecting
 upwards from the tray bottom, the tray extending at least partly about the stem, and the
cover having a portion for removably engaging on the stem.

4 A device as claimed in Claim 2 or 3, 105 wherein at the bottom the device body has a substantially flat surface for bearing on the ground.

A device as claimed in any of Claims 2 to 4, wherein the access ramp is undulated
 110 along its upper surface to facilitate upward

movement of a rodent.
6. A device as claimed in any of Claims 2 to 5, wherein the outer edge of the cover extends beyond the outer edge of the access 115 ramp.

7. A device as claimed in any of Claims 1 to 6, further comprising means for applying the device to the ground.

8. A device as claimed in Claim 7, where-120 in the said ground application means is a pointed fastening element, a shank of which is adapted to be accommodated in a cavity of one of the cover or of the bait accommodating means.

125 9. A device as claimed in Claim 1, wherein the said bait accommodating means is a stem provided with a point suitable to be driven into the ground, and the cover is a belllike cover suitable to engage on the upper end 130 of the stem at such a position as to leave between the bell edge and the ground one or more passages of suitable dimensions for the passage therethrough of a rodent.

10. A device as claimed in Claim 9,wherein the lower portion of the stem has attached thereto a stop element for limiting the penetration of the point into the ground.

11. A device for controlling rodents by means of poisoned bait, substantially as here-10 in described with reference to, and as shown in, Figs. 1 and 2 or Fig. 3 of the accompanying drawings.

Printed for Her Majesty's Stationery Office by Burgess & Son (Abingdon) Ltd.—1980. Published at The Patent Office, 25 Southempton Buildings, London, WC2A 1AY, from which copies may be obtained.